

**DEVICE AND METHOD FOR CONVERTING AN INPUT SIGNAL****ABSTRACT**

5

A device for converting an input signal having a bipolar pulse with a positive part and a negative part of same duration, into a difference signal includes a delay member with an input for receiving the input signal and an output. The delay member  
10 delays the input signal in order to obtain a delayed signal and outputs the delayed signal to the output. The device further includes a differential amplifier with a first input for receiving the input signal, a second input for receiving the delayed signal, and an output for outputting the difference  
15 signal formed from the input signal and the delayed signal.